

Title (en)
METHOD FOR FABRICATING SELFSTABILIZED SEMICONDUCTOR GRATINGS

Publication
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Application
EP 90313661 A 19901214

Priority
US 48657790 A 19900228

Abstract (en)
[origin: EP0444350A2] A quaternary semiconductor diffraction grating 21, such as an InGaAsP grating suitable for a DFB laser, is embedded in a semiconductor laser 32, such as InP. In one embodiment, the grating is fabricated by (1) forming on the top surface of an InP layer 10 an epitaxial layer of InGaAsP 11 coated with an epitaxial layer of InP 12 having a thickness which is greater than that of the InGaAsP layer; (2) forming a pattern of apertures 20 penetrating through the layers of InP and InGaAsP; and (3) heating the layers to a temperature sufficient to cause a mass transport of InP from the InP epitaxial layer 22, the thickness of the InP layer being sufficient to bury the entire surface of the InGaAsP layer 21 with InP.
<IMAGE>

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IPC 8 full level
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